

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Spring 2017 Levee Inspection Results

Reclamation District No. 2094 Wathal

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)				

** Non-receipt of Summer or Winter Inspection
Reports may effect overall annual rating.

† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2017 Levee Inspection Results

Reclamation District No. 2094 Wathal

Waterway			Bank	Unit Miles
Unit No. 01 San Joaquin River			Right	2.78
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/11/2017 - 4/11/2017			
DWR Inspector	Maksim Khashchuk			
Accompanied By	Brian Mizuno RD 2094			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start		Rating **	A	Issue No.	10
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training				
DWR ID	DWR_RD2094_01_s_2013_10				
Comment Code					
Inspector Comment					
LMA has a flood response plan in the office. It is recommended for LMA and interested local volunteers to take a flood fight training class in order to refresh on skills and methods.					

No Photos

LM Start		Rating **	A	Issue No.	11
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment				
DWR ID	DWR_RD2094_01_s_2013_11				
Comment Code					
Inspector Comment					
Supplies available on-site.					

No Photos

LM Start		Rating **	A	Issue No.	12
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals				
DWR ID	DWR_RD2094_01_s_2013_12				
Comment Code					
Inspector Comment					
O&M Manual available at LMA's office.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	0.10	Rating **	M	Issue No.	4
LM End	0.10	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.771685 °	37.771685 °
				-121.300239 °	-121.300239 °
DWR ID	DWR_RD2094_01_s_2012_4				
Comment Code					
RA : Ramp					
Inspector Comment					
An access ramp has been built on the water side and extends into the channel. This could potentially alter the channel capacity. This item was also noted in the USACE comments.					

Photo 1 of 1 : SP_2017_RD2094_320_4_20170407_00001.jpg



Tire marks shown onto the ramp from levee. Raised area extends to the trees in the background in the center of the photo.

LM Start	0.24	Rating **	A	Issue No.	7
LM End	2.76	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.769732 °	37.749741 °
				-121.301215 °	-121.289034 °
DWR ID	DWR_RD2094_01_s_2017_7				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
Acceptable vegetation control.					

Photo 1 of 1 : SP_2017_RD2094_320_7_20170417_00014.jpg



View of the acceptable vegetation control on the levee slope.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	0.65	Rating **	M	Issue No.	13
LM End	0.65	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.767514 °	37.767514 °
				-121.294926 °	-121.294926 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21464					
DS_ID:23086					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: - walkway in poor condition and needs repair.- electric conduit on waterside.					
FIELD_STRUCT_DESC: 14-inch concrete encased steel pipe and GI conduit through the levee, 10.0 feet below the crown, pump mounted on a pile structure in the stream, slide gate, 54-inch corrugated metal pipe riser on the waterward shoulder, concrete distribution box and service pole on the landward toe, installed by USCE, 1962 (O&M Unit No. 3, 1968)					
FS Date: 9/10/2013					

LM Start	0.65	Rating **	M	Issue No.	13 (cont)
LM End	0.65	Issue Type +	En	Location *	LS

Photo 1 of 3 : UCIP_SP_2017_21464_36405.jpg



WS view: gate valve in CMP riser (bottom) and pipe & pump (top) on piling structure in the channel.

Photo 2 of 3 : UCIP_SP_2017_21464_36404.jpg



WS view: pump on piling structure in the channel. Pipe (right- bottom) and conduit (bottom- left).

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	0.65	Rating **	M	Issue No.	13 (cont)	
LM End	0.65	Issue Type +	En	Location *	LS	
Category	Supplemental			GPS Latitude/Longitude		
				Start		End
Item	DWR UCIP Field Study			37.767514 °	37.767514 °	
				-121.294926 °	-121.294926 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:21464						
DS_ID:23086						
EP_NO: N/A						
Repair Type: Non-Urgent						
Crossing Status: Found						
UCIP Comments: - walkway in poor condition and needs repair.- electric conduit on waterside.						
FIELD_STRUCT_DESC: 14-inch concrete encased steel pipe and GI conduit through the levee, 10.0 feet below the crown, pump mounted on a pile structure in the stream, slide gate, 54-inch corrugated metal pipe riser on the waterward shoulder, concrete distribution box and service pole on the landward toe, installed by USCE, 1962 (O&M Unit No. 3, 1968)						
FS Date: 9/10/2013						

Photo 3 of 3 : UCIP_SP_2017_21464_36403.jpg



LS view: exposed pipe, service pole, and concrete distribution box on levee toe.

LM Start	0.91	Rating **	M	Issue No.	8
LM End	0.91	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.764169 °	37.764169 °
				-121.293562 °	-121.293562 °
DWR ID	DWR_RD2094_01_s_2017_8				
Comment Code					
AV : Abandoned vehicles					
Inspector Comment					
Remove boat from the levee slope.					

Photo 1 of 1 : SP_2017_RD2094_320_8_20170417_00015.jpg



View of the boat on the levee slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	1.25	Rating **	M	Issue No.	14
LM End	1.25	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.760581 °	37.760581 °
				-121.297373 °	-121.297373 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21544					
DS_ID:23087					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: - working as drainage system during field visit. Pump was not running.- electric conduit on WS- open pipe end in CMP riser. CMP needs cleaning.					
FIELD_STRUCT_DESC: 20-inch concrete encased steel pipe through the levee, 10.0 feet below the crown, pump mounted on a pile structure in the stream, gate valve, 54-inch corrugated metal pipe riser on the waterward shoulder, concrete distribution box and service pole on the landward toe (O&M Unit No. 3, 1968)					
FS Date: 9/10/2013					

LM Start	1.25	Rating **	M	Issue No.	14 (cont)
LM End	1.25	Issue Type +	En	Location *	WS

Photo 1 of 3 : UCIP_SP_2017_21544_36524.jpg



WS view: overview of pump (top) and CMP riser (bottom)

Photo 2 of 3 : UCIP_SP_2017_21544_36523.jpg



WS view: pipe and pump on piling structure in the channel. Walkway in poor condition.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	1.25	Rating **	M	Issue No.	14 (cont)
LM End	1.25	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.760581 °	37.760581 °
				-121.297373 °	-121.297373 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21544					
DS_ID:23087					
EP_NO: N/A					
Repair Type: Non-Urgent					
Crossing Status: Found					
UCIP Comments: - working as drainage system during field visit. Pump was not running.- electric conduit on WS- open pipe end in CMP riser. CMP needs cleaning.					
FIELD_STRUCT_DESC: 20-inch concrete encased steel pipe through the levee, 10.0 feet below the crown, pump mounted on a pile structure in the stream, gate valve, 54-inch corrugated metal pipe riser on the waterward shoulder, concrete distribution box and service pole on the landward toe (O&M Unit No. 3, 1968)					
FS Date: 9/10/2013					

Photo 3 of 3 : UCIP_SP_2017_21544_36522.jpg



WS view: damaged gate valve handle in CMP riser on levee shoulder.

LM Start	2.25	Rating **	M	Issue No.	15
LM End	2.25	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.752230 °	37.752230 °
				-121.296408 °	-121.296408 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:41726 DS_ID:23088 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - dense vegetation on WS.- working during field survey.- slide gate not found on WS. FIELD_STRUCT_DESC: 20-inch concrete encased steel pipe through the levee, 6.0 feet below the crown, slant pump mounted on a frame structure on the stream bank, 54-inch corrugated metal pipe riser on the waterward shoulder, concrete distribution box and service pole on the landward toe (O&M Unit No. 3, 1968) FS Date: 9/10/2013					

Photo 1 of 3 : UCIP_SP_2017_41726_36502.jpg



WS view: slant pump (top) on stream bank and CMP riser on levee shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	2.25	Rating **	M	Issue No.	15 (cont)
LM End	2.25	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.752230 °	37.752230 °
				-121.296408 °	-121.296408 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:41726 DS_ID:23088 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - dense vegetation on WS.- working during field survey.- slide gate not found on WS. FIELD_STRUCT_DESC: 20-inch concrete encased steel pipe through the levee, 6.0 feet below the crown, slant pump mounted on a frame structure on the stream bank, 54-inch corrugated metal pipe riser on the waterward shoulder, concrete distribution box and service pole on the landward toe (O&M Unit No. 3, 1968) FS Date: 9/10/2013					

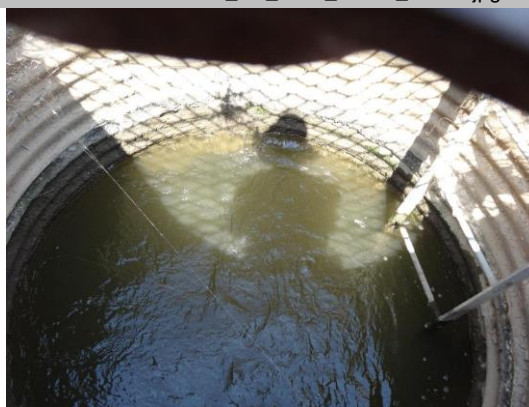
LM Start	2.25	Rating **	M	Issue No.	15 (cont)
LM End	2.25	Issue Type +	En	Location *	WS

Photo 2 of 3 : UCIP_SP_2017_41726_36501.jpg



WS view: slant pump on stream bank and dense vegetation on stream bank.

Photo 3 of 3 : UCIP_SP_2017_41726_36500.jpg



WS view: inside view of CMP riser on levee shoulder. No slide gate found.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	2.45	Rating **	M	Issue No.	16
LM End	2.45	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.752308 °	37.752308 °
				-121.293191 °	-121.293191 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21545 DS_ID:23089 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - no pipes found on either side of the levee.- concrete distribution box on LS. Soil erosion around distrinution box. FIELD_STRUCT_DESC: Rectangular concrete distribution box on the landward toe FS Date: 9/10/2013					

Photo 1 of 3 : UCIP_SP_2017_21545_36529.jpg



WS view: no pipe found on waterside.

LM Start	2.45	Rating **	M	Issue No.	16 (cont)
LM End	2.45	Issue Type +	En	Location *	WS

Photo 2 of 3 : UCIP_SP_2017_21545_36528.jpg



Enter photo 2 description or comment here.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Right	2.78	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	2.45	Rating **	M	Issue No.	16 (cont)
LM End	2.45	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			37.752308 °	37.752308 °
				-121.293191 °	-121.293191 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:21545 DS_ID:23089 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: - no pipes found on either side of the levee.- concrete distribution box on LS. Soil erosion around distrinution box. FIELD_STRUCT_DESC: Rectangular concrete distribution box on the landward toe FS Date: 9/10/2013					

Photo 3 of 3 : UCIP_SP_2017_21545_36527.jpg



LS view: erosion around a concrete standpipe on the landside toe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2017 Levee Inspection Results

Reclamation District No. 2094 Wathal

Waterway			Bank	Unit Miles
Unit No. 02 San Joaquin River				0.45
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/11/2017 - 4/11/2017			
DWR Inspector	Maksim Khashchuk			
Accompanied By	Brian Mizuno RD 2094			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Reclamation District No. 2094 Wathal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 San Joaquin River		0.45	04/11/2017 04/11/2017	Maksim Khashchuk

LM Start	0.01	Rating **	A	Issue No.	1
LM End	0.44	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.759253 °	37.760602 °
				-121.299783 °	-121.307040 °
DWR ID	DWR_RD2094_02_s_2017_1				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
Acceptable vegetation control.					

Photo 1 of 1 : SP_2017_RD2094_321_1_20170417_00001.jpg



View of the acceptable vegetation on the levee slope.

LM Start	0.05	Rating **	M	Issue No.	2
LM End	0.22	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.759549 °	37.760616 °
				-121.300319 °	-121.303081 °
DWR ID	DWR_RD2094_02_s_2017_2				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 1 : SP_2017_RD2094_321_2_20170417_00002.jpg



View of the wave wash erosion on the levee slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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